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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/016,603

10/30/2001

Toshiya Nakamura

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6532

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7590

06/28/2004

FROMMER LAWRENCE & HAUG
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EXAMINER

DEBERADINIS, ROBERT L

ART UNIT

PAPER NUMBER

2836

DATE MAILED: 06/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/016,603

Applicant(s)

NAKAMURA, TOSHIYA

Examiner

Robert DeBeradinis

Art Unit

2836

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 April 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 5 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 October 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

The reply filed 4/5/04 consists of amending claims 1, 5, canceling claims 2-4, 6-8 and remarks related to rejection of claims.

The amended abstract of the disclosure submitted on 4/5/04 is approved.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over SUZUKI 5,811,895 in view of TSUJIKADO 6,597,074 in further view of SCHEEL 6,351,401 and HIRATA 4,441,148.

Regarding claims 1, 5

SUZUKI discloses a switching power supply section (14) for receiving a DC voltage as an input voltage at a primary side thereof, switching the inputted DC voltage and generating a stabilized output DC voltage at a secondary side thereof isolated from the primary side (11a); and a current detection section (column 5, lines 40-68) for generating a detection signal in response to supply current to said switching power supply section; said current detection section generating the detection signal isolated from the primary side.

SUZUKI also discloses controlling FET switch 20, to control the charging and discharging of battery (13), with a dedicated processor (column 4, lines 7-23).

SUZUKI does not disclose conveying the detection signal to equipment (15) connected to the secondary side of said switching power supply section or a primary side capacitor for smoothing an output voltage from said rectification section or photo-coupler having a photodiode and a phototransistor.

TSUJIKADO discloses conveying detection of power switch activation (24) to equipment (12) for selecting power supplied by battery (abstract).

SCHEEL discloses smoothing capacitor C sub g for smoothing an output voltage from rectification section (2).

HIRATA discloses a current detector including a photo-coupler having a photodiode and a phototransistor (figure 3d).

It would have been obvious to one having ordinary skill in the art at the time of this invention to modify SUZUKI to convey the detection signal to equipment (15) connected to the secondary side of said switching power supply section and to add a smoothing capacitor to smooth the voltage coming from the rectification section and to couple the current detector to the primary side through a photo-coupler. The motivation would be to provide the selection means for selecting power from the battery during shutdown of the system load when the system load includes a computer. The motivation for the smoothing capacitor would be to remove ripple that might cause the current detection section to generate a false synchronization pulse. The motivation to use a photo-coupler in the current detector would be to isolate the current detection logic from

the primary side voltage to protect the low logic circuits from the higher voltage on the primary side.

Response to Arguments

The Applicant argues that TSUJIKADO was filed on April 18, 2001 and the application, on the other hand, has claimed priority under 35 U.S.C. 119 based upon foreign application 2000-333570 filed on October 31, 2000 in Japan. The Applicant is correct TSUJIKADO' S filing date is noted to be April 18, 2001, however TSUJIKADO has foreign priority data that takes the reference back to April 18, 2000.

The Applicant argues that the cited references for the above rejection does not disclose a primary side capacitor for smoothing an output voltage from said rectification section and therefore the application is distinguishable over the cited art. The Examiner believes it would have been obvious to add a smoothing capacitor.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not

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mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication should be directed to Robert L. DeBeradinis whose number is (703) 306- 5857. The Examiner can normally be reached Monday-Friday from 8:30 am to 5:00 pm.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Brian Sircus, can be reached on (703) 308-31190. The Fax phone number for this Group is (703) 308-7722.

RLD

JUNE 23, 2004

A handwritten signature in black ink, appearing to read "Robert L. DeBeradinis", written in a cursive style.